

## Inventories Developed to Support SIP Modeling

- All inventories were based on CEFS Version Rf#980.
- Rf#980 is developed from the same 2002 annual average inventory in CEIDARS as v1.06 of the summer planning inventory.
- Modeling inventories and planning inventories are different:
  - Modeling inventories are developed for a particular month – the summer planning inventories use temporal data for May through October.
  - Modeling inventories are developed for both a weekday and a weekend day (for each month) – the summer planning inventories represent an average day.
- Modeling inventories were developed for the following years: 2000, 2002, 2012, 2018, 2020 and 2023.
- In development of the modeling inventories, baseline adjustment factors were calculated to account for changes in emissions that have already occurred, but have not been reflected in the Rf#980/ v1.06 inventories.
- The baseline adjustment factors vary by year, county and inventory category.
  - The inventory category can be at a broad level, such as on-road motor vehicles, where adjustment factors were applied to the entire on-road motor vehicle emissions.
  - Some adjustment factors were applied at the summary category, such as all consumer products.
  - Some adjustment factors were applied to individual categories (EICs).
- Additional adjustment factors were also developed to reflect the proposed SIP concepts. The SIP concept adjustment factors were only applied to the 2018 and 2020 modeling inventories. The SIP concept adjustment factors were applied in the same manner as the baseline adjustment factors.
- Following is a list of the adjustment factors that were applied to Rf#980 for each year. Adjustments were made to the entire CCOS domain unless noted below.
- **2000**
  - No adjustment factors were applied.

- **2002**
  - Only adjustment factor applied was to reflect changes in SJVUAPCD controls (Rule 4702 Phase 2 agricultural engines) – applied to SJV only.
- **2012**
  - Baseline adjustment factors were for 1) on-road motor vehicles, 2) off-road sources (individual adjustment factors were developed for ships in the Bay Area, SJV and Sacramento NonAttainment area), 3) consumer products, 4) SJVUAPCD controls (CAFO, Rule 4702 Phase 2 agricultural engines, and include composting emissions) applied to SJV only and 5) rice straw ERCs (Emission Reduction Credits) for Sacramento, Yolo and Butte Counties.
  - No SIP concept adjustments were made.
- **2018**
  - Baseline adjustment factors were for 1) on-road motor vehicles, 2) off-road sources (individual adjustment factors were developed for ships in the Bay Area, SJV and Sacramento NonAttainment area), 3) consumer products, 4) SJVUAPCD controls (CAFO and Rule 4702 Phase 2 agricultural engines) applied to SJV only
  - SIP concept adjustment factors were for 1) on-road motor vehicles, 2) off-road sources and 3) consumer products
- **2020**
  - Baseline adjustment factors were for 1) on-road motor vehicles, 2) off-road sources (individual adjustment factors were developed for ships in the Bay Area, SJV and Sacramento NonAttainment area), 3) consumer products, 4) SJVUAPCD controls (CAFO and Rule 4702 Phase 2 agricultural engines) applied to SJV only
  - SIP concept adjustment factors were for 1) on-road motor vehicles, 2) off-road sources and 3) consumer products
- **2023**
  - Adjustment factors were for 1) on-road motor vehicles, 2) off-road sources (individual adjustment factors were developed for ships in the Bay Area, SJV and Sacramento NonAttainment area), 3) consumer products, 4) SJVUAPCD controls (CAFO, Rule 4702 Phase 2 agricultural engines, and include composting emissions) applied to SJV only and 5) rice straw ERCs for Sacramento, Yolo and Butte Counties.
  - No SIP concept adjustments were made.